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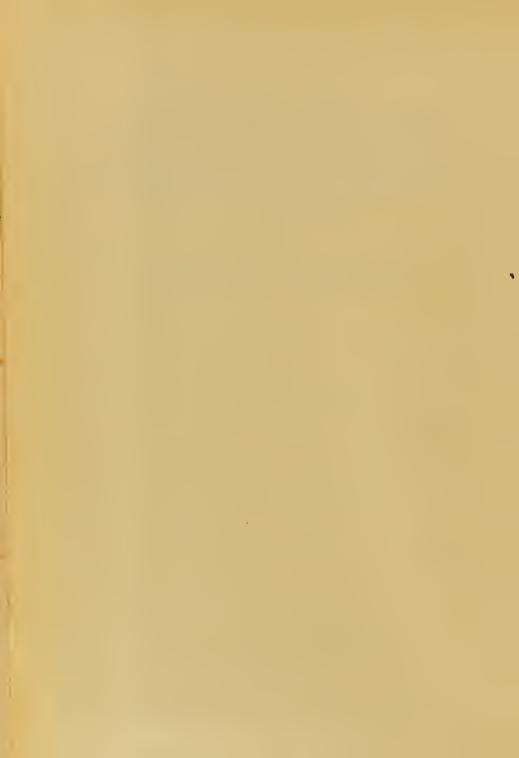
Fifty Brief Biographic Clinics Upon Living Patients.

BY
GEORGE M. GOULD, M.D.
PHILADELPHIA, PA.

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FIFTY BRIEF BIOGRAPHIC CLINICS UPON LIVING PATIENTS.

By George M. Gould, M. D.. Philadelphia, Pa.



HEN I published biographic clinics on certain famous dead men, many critics said, and more thought but did not say, that this was "all theory and hearsay." It was neither

hearsay or theory, but the objection somewhat eased the minds of the critics and gave them breathing-time. To the call for "facts" many answers have been made by many refractionists. The following series of reports is another. They number 50, each one perhaps representing a hundred, and are epitomes of the case-histories of old or new patients presenting in my office during several weeks. Those only were chosen in which the ametropia of the patients had been diagnosed by other oculists prior to coming to me.

Each case is just as much and as accurately a biographic clinic as would be the records of a whole life, because once a patient has been shown by experiment upon his own body that correct refraction frees from these sufferings, there is not likely to be any lapse or relapse to old conditions. Medicine is empiricism, almost pure and simple, i. e., induction, and all true science

is induction. In medicine the test is the therapeutic test. If other glasses failed to cure, and these did cure, it follows that when in the future, owing to natural ocular changes, the symptoms recur and are not again relieved the patient will seek until he finds the relief which is possible. A standard has been set up which will ensure him a future life free from the ills he once endured. The old patients have their biographic clinic behind them, while that of the young ones will consist of a brief statement that, except for a little while, it was luckily avoided. Happiness has a history of extreme brevity.

The world, especially the lay world, but rapidly also the medical part, is at last becoming thoroughly aroused and convinced that a vast deal of its suffering, and of its functional systemic disease, is due to eye-strain. The absorbing interest centers about the crux of the whole matter—the right correction of ametropia. The alldominating reason for the delay in the reform, for the nonacknowledgment of the truth, is that, as a profession, our refraction-work has not been correctly done. Avarice, desire for success, over-exaggeration of surgery, blunderfulness, wild theories of tenotonomania, ophthalmometers, etc., lack of standardization of methods of diagnosis,—i. c., lack of a simple good refraction school-all these things and more have usually made our diagnoses of errors of refraction and our glass-treatments, utter and amazing farces.

Ophthalmology, long vaunted as the most exact of medical sciences, is in truth the most ludierously inexact. I risk much nonpertinent and pettifogging criticism in reporting these cases illustrating some of the errors which in a few weeks I have noticed. Every good refractionist could testify in the same way. But such good refractionists are not the ''leaders,'' professors and success-hunters. Precisely these men are the very worst refractionists.' For example:—

Case 1.

From a distant state a woman of 50 came to me whose life had been one of great and almost constant suffering, especially from headaches and sick headaches. "My life has been spoiled by these headaches." In childhood days they began, and with vomiting. Morphin has been constantly required to allay the agony. Between these crises there have been dull headaches most all the time. Indigestion, flatulence, and constipation have been added in the last ten years, and in the last two years dizziness has appeared. She had been treated by the best physicians of her neighborhood, and latterly by the most famous consultant and authority in several adjacent states. The treatment was for "kidney disease."

Within the last years there have been swellings and abnormal skin-changes, of parts of the body, mental obfuscation and slowness of speech, faulty memory, etc. Vision for some time has been dimming a little, and reading had been

impossible for years. "Rheumatism" has bothered her since 12 years of age. Several oculists had tested her eyes, the last prescription being: B. E.+sph. 1.75+Cyl. 0.50 ax. 90°, but her axes are 83° and 100°, a difference alone and without others which would cause the greatest eyestrain, especially in misfitting glasses.

But after all this had been allowed for, I was unsatisfied. The duty to find eyestrain if it exists is no greater than that to find the independent systemic disease. The duty to be "an eyestrain crank" is not greater than the duty not to be one. Since my college days I had not scen a case of myxedema. It struck me that this woman's essential disease, produced or not by eyestrain, was myxedema. I asked a competent general physician to make a diagnosis, and after thorough tests this disease was demonstrated. And yet the general physicians who did not suspect it and treated the woman for the wrong disease (there was no kidney-tr ,) would speak with scorn of refractionis and hobbyriders.

Case 2.

In 1902 a married woman 32 years of age consulted me who was then addicted to chloral because of headache which had existed "every day for her whole life." She was what is commonly called "a nervous wreck" from "nervous prostration," or "nervous exhaustion." She was wearing—from an authority:—

R.—Sph. 3.00—Cyl. 1.75 ax. 180°. L.—Sph. 3.00—Cyl. 1.75 ax. 10°.

Besides this she had "fronts," 6° prism, each eye, bases in.

I found her static errors of refraction;

R.—Sph. 3.50—Cyl. 0.75 ax. 180°=20/30? L.—Sph. 2.50—Cyl. 2.00 ax. 5°=20/30?

It is thus plain that the physician's glasses were making her eyestrain worse than none at all. She had indeed 12° of exophoria, but prisms worn constantly for this lack of adduction-power also increase Nature's difficulty and prevent cure. I ran this woman's adduction power up to 110°, and as the adduction-power grew I demanded the decrease of the chloral, until in a few months it was stopped altogether. At this time all suffering had ceased, and has not returned since. The last glasses ordered were in January, 1907, and were as follows:

L.—Sph. 2.62—Cyl. 1.87 ax. 10°=20/30+} R.—Sph. 3.37—Cyl. 1.25 ax. 170°=20/30+} 20/25+Sph. 0.87 added for near in bifocals.

Case 3.

A famous authority in ophthalmology, a writer of great text-books, gave a man 46 years old, for reading purposes:—

R.+Sph. 0.50+Cyl. 0.50 ax. 90°. L.+Sph. 0.50+Cyl. 0.25 ax. 90°.

These did not afford any relief of headaches, sleepiness, and burning and fatigue of the eyes. Because such relief could only result from wearing:—

R.+Sph. 2,25+Cyl. 0.25 ax. 70°. L.+Sph. 2,00+Cyl. 0.25 ax. 10°.

L.+Sph. 2.00+Cyl. 0.25 ax. 10°. If the "little men" would stop imitating the "big men," and would learn (by desiring) to neutralize eyestrain, the big men would lose all their patients, and the big would become little, while the little would grow big.

Case 4.

In 1904 a woman from Ohio consulted me and gave so long a list of severe and curious symptoms that one at first thought of imagined diseases. I soon became convinced that there was not the slightest exaggeration or pleasure influencing her in her accounts. Among the chief were utter inability to read, etc., without intense nausea; pain for many years in occiput, extending thence to right arm and leg, with numbness of fingers and finally of feet; indigestion, flatulence, constipation; rheumatism for 3 years; tender spots in spine, and at base of brain; has always had sick-headaches, especially when traveling. The chief complaint was of almost constant nausea. She has had glasses for 8 years from various oculists, without relief, the last worn when she came to me being:-

R.+Cyl. 0.25 ax. 90°. L.+Cyl. 0.25 ax. 75°.

A radical change in the glasses brought betterment, but a second was required before all the symptoms disappeared. The errors in December, 1905, were:—

R.+Sph. 0.25+Cyl. 0.37 ax. 55° \ L.+Sph. 0.25+Cyl. 0.37 ax. 55° \ Distance B. E.+Sph. 1.00 added \ Near Bifocals

Case 5.

In 1890 a man of 30 years of age came to me "almost a wreck," from nearly continual "dizziness." He has sometimes as many as 40 or 50 attacks a day, especially in walking, and has been unable to look up or down without bringing on an attack. He also had most typical and extreme agoraphobia, or inability to go in open squares or places, with giddiness and suffering. Ten years previously he began having glycosuria, and had suffered with it ever since. I at once sent him to a good general physician, who found the percentage of sugar in his urine high, and put him on strict diet, etc. He was wearing from Professor———:

R.—Cyl. 0.75 ax. 90°.

L.—Sph. 1.00+Cyl. 3.50 ax. 120°.

I made radical changes in his glasses and had frequently to modify my findings in subsequent years, until the error of refraction became more uniform. In 1891 no more "dizzy spells" were occurring, and he pronounced himself "a new man." In 1890 he tired of dieting and began to eat everything he wanted and has done so since. Agoraphobia had also disappeared. He is an obstinate and self-willed man and would not allow unrinalyses made. In 1904 one showed a low percentage of sugar, but the

man is now apparently healthy and is working every day full time as a printer. His last refraction was:

R.—Sph. 2.00—Cyl. 0.75 ax. 90°=20/20+ L.—Sph. 2.75—Cyl. 6.50 ax. 120°=20/20+

Case 6.

From a physician a boy of 7 years of age was wearing B. E. +Sph. 1.00. The right eye was strabismic, with less than one-half vision, and evidently going out of use. With proper glasses the right eye came into function, and its acuteness began increasing. The last glasses ordered were:—

R.+Sph. 4.00+Cyl. 1.50 ax. 105°=20/30 L.+Sph. 4.50+Cyl. 1.50 ax. 75°=20/20+

Case 7.

In 1903 a man of 50 years of age came to me wearing for reading only, B. E.+Sph. 2.00. His single complaint, to use his own words, was "thumping in the back of his head." It disappeared upon wearing:—

R.—Sph. 0.25—Cyl. 0.62 ax. 90° L.—Cyl. 0.75 ax. 90° R. and L.+Sph. 1.75 added for near Bifocals.

Case 8.

In 1893 a woman of 20 came to me complaining chiefly of great "aching of the face," not particularly to be located, and also of "sickness of the stomach." Both symptoms had been severe, existing most of the time, and as far back as she could remember in childhood. She had

been reduced in flesh with other concomitant symptoms. I could not learn the figures of the glasses she had tried from other oculists without relief. I ordered:—

R.+Sph. 1.50+Cyl. 1.00 ax. 65°. L.+Sph. 1.00+Cyl. 0.25 ax. 115°.

The gastric distress and the face-ache immediately disappeared and in four months she had gained 22 lbs. in weight.

Case 9.

"Neuralgie pain in the temples" was the chief eomplaint of a young man who had been wearing glasses prescribed by two of our most prominent professors of ophthalmology. The last glasses were as follows:—

R.+Cyl. 0.25 ax. 90°. L.—Sph. 2.50.

The man finally found complete relief by:—R.+Cyl. 0.50 ax. 90°. L.—Sph. 1.75—Cyl. 2.50 ax. 70°.

Case 10.

A little boy of 3 years of age was ordered to wear a blinder over the left eye for internal strabismus of the right eye by the ophthalmie surgeon of a great hospital, but no glasses were ordered. Of course the defect was not remedied, nor could it ever have been cured without correction of the ametropia. At present, after proper glasses have been worn for a few years, the lad has perfect and equal acuteness of vision with each eye, and with his spectacles has no squint. The last correction was:—

R.+Sph. 1.25+Cyl. 0.75 ax. 90°. L.+Sph. 1.00+Cyl. 0.50 ax. 90°.

Case 11.

Thirteen years ago a man of 33 had been having great gastric distress and headaches when he did not wear a blinder over the right eye. With the blinder he was comparatively free from the troubles. I found binocular vision was not possible. He had so great exophoria and hyperphoria that the possibility of fusion had long been renounced. He was wearing:—

R.+Cyl. 0.50 ax. 90°. L.+Cyl. 0.75 ax. 120°.

With prisms 3°each eye bases in.

So long as fusion was entirely out of the question, one wonders why the previous oculist added the prisms. The right eye was going out of use, its acuteness being only about 20/50. The headaches and severe gastric distress at once disappeared, and have not recurred, by wearing:—

R.+Cyl. 0.50 ax. 100°. L.+Cyl. 0.62 ax. 100°.

There is no binocular vision, of course, but the right eye is preserving all the visual acuteness not lost when first seen by me; there is no use of the hideous blinder, and the man is healthy and happy.

Case 12.

Over three years ago a physician's wife, aged 33, consulted me for the most severe and "typical migraine" (if there is such a disease, and if any case of disease is typical), coming on 4

years previously, the violent seizures recently recurring several times a week, and lasting about 24 hours. The excruciating pain began in the right temple, the vein there becoming enormously distended. The vomiting was so violent that the patient "became purple" in the face and especially about the eyes. The woman had been under the care of "the best oculists" during the previous attacks, and good medical skill had done for her all that seemed possible. The dis
**Jase* was uninfluenced by all glasses and by any treatment.

The great mistake made by one of the oculists was to put the eyes, as a test, for a week or two under continuous cycloplegia. He failed to recognize that there is a habit of disease, which cannot be broken up suddenly. Because a short test did not break up the outbreaks he concluded the "migraine" was not in this case of ocular origin. The glasses that had been ordered were only approximately correct, but eye glasses were allowed, and even these were not worn constantly, and no difference was made between distance and near corrections. Under proper glasses the attacks soon ceased and have not recurred since, perfect health having been uninterrupted. Compare Osler and all the textbooks on nervous diseases.

Case 13.

From Dr. ———, of New York City, Miss S., aged 45, in 1899, came to me, wearing ludic-rously wrong glasses:—

R.+Cyl. 1.75 ax. 130°=20/60. L.+Cyl. 1.25 ax. 30°=20/50.

She had been long having headaches every week, lasting a day or two, beginning in the forehead, extending to the occiput, pains in the eyes, etc., but the most unendurable symptom was twitching of the right eyelid and museles of the right side of the face. Out of deference to the neurologists I should not mention the word chorca. In a few months the headaches and the "pseudochorea" had entirely vanished and have never recurred. The last correction in 1906 was:—

R.+Sph. 0.87+Cyl. 3.25 ax. 30°. L.+Sph. 0.62+Cyl. 2.50 ax. 150°. And for near work proper sphericals added.

Case 14.

Another example of erroneous prognosis with a cynic wandering about for many years since making light of the "science" of medical men, is this:—A woman of 40 consulted the chief surgeons of the United States concerning her exophthalmie goiter. Most advised operation, because the great European authorities so advised. The woman would not eonsent, but posted off to see the greatest of authorities in Europe. He at once demanded operation. She refused, and before leaving the hotel she received an urgent letter from the surgeon, pleading earnestly that to save her life she would consent to operation. She never was operated upon, and today is mell.

Case 15.

The dangers of making definite and fatal prognoses, while at the same time not prescribing the glasses needed to correct ametropia, are indicated by the case of Mrs. A. L. M., who in the last 40 years has consulted about every oculist of repute in Eastern cities. "All differed greatly in their diagnoses and prognoses''-(the woman from much experience with us was very expert in ophthalmologic matters), some saying "glaucoma," others "hemorrhage," etc. great Dr. - told her many years ago she would not go quite blind, but could never read much; the famous Professor ———————————————————————21 years ago told her she would go blind; in 1889 Professor —— told her she had Bright's disease, and looked most solcmn; Dr. - of -, and Dr. - of - ordered glasses she could not wear. At the age of 70 this woman has absolutely perfect 20-foot vision with each eye, and has not a sign of ocular disease. She has long been wearing such glasses as these:

R.+Sph. 1.25+Cyl. 0.25 ax. 155° L.+Sph. 1.25+Cyl. 0.62 ax. 145° Distance R.+Sph. 3.75 and Cyl. Near Bifocals.

Case 16.

In 1901 a woman of 45 had been given reading glasses (none for distance) by a prominent oculist of a city in New York State, as follows:

R.+Sph. 1.00+Cyl. 0.37 ax. 90°. L.+Sph. 1.25.

What the woman needed was:-

R.+Sph. 0.25+Cyl. 0.37 ax. 75° \ Distance L.+Sph. 0.37+Cyl. 0.50 ax. 140° \ Distance R.+Sph. 1.50 and Cyl. \ Near-work L.+Sph. 1.50 and Cyl. \ Near-work Bifocals.

Besides other symptoms, this woman, for 30 years, had suffered from asthma. Since then this patient has had no asthma until in 1904 albuminurea appeared, and for a time there was some recurrence of asthmatic attacks.



NE OF our leading ophthalmic surgeons was consulted two years ago by a young man 17 years old, who some six months previously had been struck in the right eye by a

ball. The injured eye had shown no symptoms of trouble during six months, but its vision now became blurred. The retina was peculiarly streaked and pigmented, and the Professor jumped to the eonelusion that traumatic retinitis, etc., was in progress, and ealmly informed the patient that the eye could not be saved. The patient consulted another oculist, who found that each eye had perfect acuteness of vision, after correction of ametropia. He also found iritis of the right eye in progress and the disease ran its usual course with perfect recovery.

The nature of the ametropia made it clear that the iritis had little or no relation to the blow from a ball, six months before. And it proved that if the patient had been more trustful he might have lost his eye from neglected iritis or his health from uncorrected ametropia, and eurvature of the spine. I found that the following terrible error of refraction had been wholly neglected:

R. + Sph. 3.25 + Cyl. 0.50 ax. $90^{\circ} = 20/20$ + L. + Sph. 2.25 + Cyl. 0.25 ax. $75^{\circ} = 20/20$ +

There was head-tilting, spinal eurvature result-

ing from the peculiar axis of astigmatism in the dominant eye, which was the left, because the higher error in the right eye had turned the right-handed man into a left-eyed man. Dr. H. Augustus Wilson took charge of the spinal deformity, and under his skilled treatment aided by the glasses I had ordered, he reported that the curvature had disappeared, and also a number of morbid symptoms objective and subjective. A beneficent revolution took place in the man's intellect, physiognomy and poise.

Case 20.

In November, 1904, a woman of 45 eame to me eomplaining of dizziness, languor, pain beneath the shoulder blade, etc. All through her life up to recently she had had great nausea and anorexia. For the past ten years she has worn glasses only for near work prescribed by her local oculist—but with no relief of the symptoms. The blundering stupidity of the old ophthalmology is shown in these glasses:—B. E. + Sph. 2.00 for near-work only. Her errors of refraction diagnosed by means of eyeloplegia are:

R. + Sph. 1.25 + Cyl. 0.37 ax. 165°. L. + Sph. 1.50 + Cyl. 0.25 ax. 165°.

Even before finding these astigmatic axes I had noted head-tilting and even as a girl every-body had recognized the fact. Of course the spinal curves were found, for there cannot be these axes of astigmatism without the resultant spinal curvature. Sph. + 0.87 and 1.12 with cylinders, for distance, and 2.50 and 2.75 and cylin-

ders, in bifocals at once relieved the pain in the back, the dizziness, etc.

Case 21.

One of Philadelphia's most successful oculists within a few years has ordered for a woman of 32 the following:

- (1) R. Sph. 0.25 Cyl. 1.25 ax. 15°. L. + Sph. 0.25 — Cyl. 1.25 ax. 175°. with + Sph. 1.00 added for near-work.
- (2) R. + Sph. 0.25 Cyl. 1.50 ax. 15°.
 L. + Sph. 0.50 Cyl. 1.25 ax. 175°.
 with + Sph. 0.25 added for near.
- (3) · R. Cyl. 1.50 ax. 15°. L. + Sph. 0.25 — Cyl. 1.25 ax. 175°. with + Sph. 1.00 added for near.
- (4) R. Cyl. 1.50 ax. 15°. L. + Sph. 0.50 — Cyl. 1.25 ax. 170°. with + Sph. 1.00 added for near.

The list of this woman's symptoms would tire the reader, but headaches, biliousness, etc., were in the catalogue. Her true correction was:

R. — Sph. 0.37 + Cyl. 0.75 ax. 105°. L. — Sph. 0.25 + Cyl. 1.00 ax. 90°.

Of course she was a head-tilter, had spinal trouble, etc. But what should be done with the blunderer who ordered high myopic cylinders for the reverse sort of an error? Is it not time to establish a School of Refraction?

Case 22.

A young woman came to me complaining chiefly of dizziness and headaches. She was wearing—

R. + Sph. 3.00 + Cyl. 0.50 ax. 90°. L. + Sph. 2.75 + Cyl. 0.50 ax. 180°.

The prescriber forgot to make any deduction from the mydriatic error of refraction, a mistake that is strangely common, and very expensive—to the patient. The prescription was really for the full error of refraction estimated under eyeloplegia. Had 0.75 been deducted from the spherical the patient would have been relieved of her symptoms without changing oculists.

Case 23.

A woman, 38, complaining of epiphora, headache, constipation, great "nervousness" and irritability came to me in 1904 wearing B. E. + Sph. 6.50, with + Sph. 1.00 D. added for near-work. Her symptoms disappeared with the following correction:

B. E. + Sph. 6.50 + Cyl. 0.50 ax. 90° Distance. Bifocals.

B. E. + Sph. 9.00 + Cyl. 0.50 ax. 90° . Reading. Bifoeals.

Case 24.

A woman 28 years of age came to me in 1899 eomplaining of headache and failing vision, especially of the right eye. From "a good oculist" she was wearing—

R. + Sph. 4.50 + Cyl. 1.00 ax. 45°. L. + Sph. 4.50 + Cyl. 1.50 ax. 135°.

But her full (mydriatic) correction at this time was—

R. + Sph. $8.00 + \text{Cyl.} 1.00 \text{ ax. } 25^{\circ} = 20/50.$ L. + Sph. $7.50 + \text{Cyl.} 1.00 \text{ ax. } 155^{\circ} = 20/50.$ After several slight changes of glasses in subsequent years I finally secured 20/20 vision with each eye, and complete relief of the subjective symptoms.

Case 25.

In a case of "typical migraine" in a lad of twelve years of age, I was at my wits' ends to bring permanent relief by glasses, although preaching the doctrine that the disease is due to eye-strain. I had failed, at first, to find the correct axes of astigmatism, because I had not then discovered the influence of tilted head, spinal curvature, etc. There was temporary relief a second time from axes 70° both eyes. But the headaches and vomitings returned. Finally I found the boy had subnormal accommodation and bifocal glasses made an end of the disease, "the nature of which is unknown." If the poor boy had got into the hands of the neurologists his life would have been speedily and absolutely wrecked.

Case 26.

A man of 34 had suffered from "typical migraine," if there is such a disease, most of his life. The nausea, headaches, and vomiting were "becoming unbearable." He had been wearing glasses from a successful "ophthalmic surgeon" for the last 13 or 14 years, with no relief of the headache and sick headache. The last glasses were the same for each eye, viz.: — Sph. 3.75 — Cyl. 0.75 ax. 90°. His static error of refraction was found to be—

R. — Sph. 2.75 — Cyl. 1.50 ax. 95°. L. — Sph. 3.00 — Cyl. 2.00 ax. 85°.

The lenses were ordered full strength for distance, and for near-work others less strong by 0.62 D. Sph. The man has not had a headache or any vomiting attacks since wearing this correction. Overcorrection of myopia, with inaccurate correction of astigmatism and anisometropia, are the sources of the sufferings of a multitude of patients, the "success" of their oculists, the hatred of eye-strain exaggerators, and the reason that "the nature of migraine is unknown" by "neurologists" and "ophthalmologists."

Case 27.

In 1903 a woman of 34 consulted a famous professor of ophthalmology, a writer of great text-books, and consorter with boss-politicians; by him was ordered—

R. + Sph. 1.00 + Cyl. 0.50 ax. 75°. L. + Sph. 1.00 + Cyl. 0.62 ax. 105°.

She has long had "nervous dyspepsia," indigestion, general weakness and invalidism, with depression of the spirits, throbbing in temples, etc. Reading, writing, sewing, etc., bring on the symptoms; stopping cures them. The professorial glasses did not help her because the following were required:

R. + Sph. 2.50 + Cyl. 0.62 ax. 75°, Prism 3° Base up.

L. + Sph. 2.50 + Cyl. 0.62 ax. 115°, Prism 3° Base down.

There was also subnormal accommodation, and

-+ Sph. 1.50 in "films" were required in bifocal spectacles. She is now a happy woman, and is not any longer worried by the dreaded inheritance of insanity supposedly handed down from intermarrying cousins. The "eyes-examined-free" optician could have done better than the great specialist M. D.

Case 28.

A woman of 25 came to me unrelieved of frontal headache, indigestion, pain in eyes, etc., by + Sph. 0.50 both eyes, worn for five years. In order to get relief of the symptoms she needed—

R. — Sph. 0.87 + Cyl. 1.50 ax. 95° . } Distance. L. — Cyl. 1.25 ax. 180° .

R. + Cyl. 1.50 ax. 95°. L. + Sph. 0.87—Cyl. 1.25 ax. 180°. For near-work

The + Sph. 0.50 were far less helpful than would have been the ministrations of Mrs. Eddy.

Case 29.

About a month before coming to me Mr. A. B., aged 57, had been ordered by a neighboring oculist—

. R. + Cyl. 1.25 ax. 180°. L. + Cyl. 2.50 ax. 180°. Distance.

B. E. + Sph. 2.50 added. Bifocals. Near.

The man had had headaches and "liver trouble" all his life. The lack of any glasses and the wearing of such incorrect ones as the foregoing prescription commands have been the causes of his fifty or more years of suffering. What he has needed is the following:

R. + Sph. 0.75 + Cyl. 0.87 ax. 180° . L. + Sph. 0.25 + Cyl. 2.50 ax. 180. Distance.

R. + Sph. 3.25 and cylinder. L. + Sph. 2.25 and cylinder. Near.

Bifocals.

The first prescription illustrates a common error besides the inaccuracy of the distance glasses and the failure to estimate the astigmatism rightly. When the inaccurate diagnosis of the hyperopia is mechanically carried over to the estimate of the presbyopia, the presbyopic correction of the right eye is insufficient.

Case 30.

A physician of one of the Southern States, aged 36, was examined about three years ago by one of the best known professors of ophthalmology in the South, who advised tenotomy—for orthophoria! This was refused. He also advised if operation was not permitted that prismexercises should be undertaken—for orthophoria! He also advised for both eyes (without cycloplegia!) + Sph. 0.50, saying that there was "not enough astigmatism to make trouble." A New York City oculist subsequently advised B. E. + Sph. 1.00, and another of St. Louis ordered B. E. + Sph. 0.75. For eight or ten years this physician has suffered from sick headaches, with vomiting. He still had them when he consulted me recently, and, as he had not consented to

tenotomies, he still had his orthophoria. I ordered:

R. + Sph. 0.25 + Cyl. 0.50 ax. $162\frac{1}{2}^{\circ}$. L. + Sph. 0.37 + Cyl. 0.25 ax. 20° .

The patient was immediately cured of his "migraine." Tenotomy for orthophoria, over-correction of hyperopia, no correction of anisometropia, unsymmetric astigmatism, is malpractice, and even more surely if advised by famous and erudite ophthalmic surgeons.

Case 31.

Three years ago a woman 27 years old was sent to me by a general physician of Philadelphia. She had about all the diseases, according to the reports of herself and many physicians, which are possible in a single organism at one time. She had worn glasses, unrelieved of her multiform sufferings, for nine years. The chief symptoms had been headaches, of all kinds, but particularly extending from the left temple to the occiput, and thence to the neck, with nausea. These attacks lasted sometimes as long as two weeks without ceasing. The shorter ones occurred about twice a week, especially if she did any reading, writing, or sewing. Besides these there have been "nervous attacks," followed by "collapses," coming on suddenly, with great pain and "cramps" about the waist-line, with vomiting. Some years ago there were operations for floating-kidney, Bright's Disease, etc. Many other symptoms might be listed. I found that she was wearing Both eyes, + Sph. 0.50. I ordered:

R. + Sph. 0.12 + Cyl. 0.37 ax. 90°. L. + Sph. 0.50 + Cyl. 0.25 ax. 90°.

In a month or two every symptom had vanished, and the woman was a well woman in every respect, and has continued so since. When she came to me she weighed 112 pounds and might have posed for a picture of suffering and despair. She soon weighed 168 pounds. I did not at first discover a subnormal accommodation of 1.50 D. which is now worn in bifocals. Astigmatism, "too slight to notice or correct" for the "ophthalmic surgeon," may sometimes mean more than all the world for the patient.

Case 32.

Some years ago a teacher, a woman 34 years old, eame to me wearing for four years an over-correction of compound hyperopic astigmatism, and without relief of constant headaches, sick headaches, and poor health generally. Her eyes were still struggling to retain binocular vision under the wrong glasses, and under the enormous resultant difficulties represented by 17° of exophoria, and 6° of hyperphoria. Her abduction was 14°, and adduction 18°. I ordered proper spectacles, and told her that the tenotomies advised, not done, by the Professor, her former oculist, were unnecessary. By prism gymnastics I ran her adduction-power as high as 110°, but usual exercises were carried on with

35° prisms each eye bases out. For several years she has now had perfect muscle-balance (no hyperphoria, and 2° of esophoria) and perfect health, without headache, indigestion, etc.

Case 33.

Five years ago a girl of 14 consulted the most renowned of the oculists of Boston, who prescribed for her—

R. — Sph. 1.75 — Cyl. 1.50 ax. 180° .

L. — Sph. 3.00.

She again consulted him two years ago and was told that although her astigmatism had lessened she should continue to wear the same lenses, and this she has done. This young woman is the daughter of one of our greatest scholars, and herself needed for her literary work the most accurate correction of her ametropia possible. She has been wearing the above, but her full error is—

R. — Sph. 1.50 — Cyl. 1.12 ax. 180°. L. — Sph. 2.25 — Cyl. 0.62 ax. 90°.

Not to find the unsymmetric astigmatism of the left eye; to over correct the myopia of both eyes; to find astigmatism lessened and not change the lenses,—these are ophthalmic sins worthy of "conservatism," and to be expected in those who ridicule the "eyestrain exaggerater." A few more years of use of the old glasses and the severe nervous and neuralgic headaches from which the patient suffered would have resulted in tragedy aplenty for her and for her parents.

Case 34.

About a year ago a prominent oeulist brought his daughter, a robust, fine example of womanhood, to me. She had been free from headaches until during the last two years. Since beginning a college course of study she has been having "terrific headaches with vomiting." The records show that as many as eight attempts have been made to estimate the error of refraction, all differing from each other, decidedly, all contradictory and impossible to be correct. The last glasses ordered three months previously were:

 $R. - Sph. 0.12 + Cyl. 0.37 ax. 180^{\circ}$.

L. — Sph. $0.12 + \text{Cyl. } 0.37 \text{ ax. } 165^{\circ}$.

The error was found to be:

R. — Sph. $0.25 + \text{Cyl.} \ 0.87 \ \text{ax.} \ 180^{\circ} = 20/30$.

L. — Sph. $0.25 + \text{Cyl.} \ 0.62 \text{ ax.} \ 180^{\circ} = 20/30 +.$

For many years more disastrous results have been avoided by non-use of the eyes in nearwork and by life in the open air most of the time. The increase of amblyopia in a young and healthy person is a danger signal which should not be ignored. In a recent letter from the father he tells me: "My daughter is wearing the spectacles you ordered constantly, and has no trouble of any kind. She broke a lens and during the two days she was without them she had the headaches as before." This case-history at least teaches that the most needed thing in ophthalmology and medicine is a serious and thoroughgoing School of Refraction.

flabby spinal muscles, etc. There is no organic Case 35.

A woman of 32 years of age has suffered most of her life, and increasingly with each later year from almost constant vertical headache; "bilious attacks," nausea, terrible insomnia, etc. She has worn glasses for about seven years from several oculists, but with no relief. She has been forced to renounce her life-work, in which she was skilled and successful. As early as 1899 she had a high degree of amblyopia, the record of the glasses ordered at that time being:

R. — Sph. 0.25 — Cyl. 0.50 ax. $60^{\circ} = 6/10 +$ L. — Sph. 0.75 — Cyl. 0.25 ax. $105^{\circ} = 6/10$?

A later prescription by the same oculist reads:

R. — Cyl. 0.50 ax. 60° .

L. — Sph. 0.25 — Cyl. 0.50 ax. 120°.

The last glasses by a New York City ophthalmometric expert neutralize both eyes the same, — Sph. 0.50.

Her proper correction is:

R. — Cyl. 0.50 ax. $45^{\circ} = 20/40$.

L.—Cyl. 0.62 ax. $90^{\circ} = 20/40$?

with Sph. + 1. added for near-work because of subnormal accommodation. I at once noticed that the patient tilted her head habitually to one side, and to my inquiry she said she had always done this, and that she was treated for spinal curvature when 15 years of age.

An orthopedic surgeon, Dr. H. Augustus Wilson, was consulted, who reported "functional scoliosis with localized spots of tenderness in the region of the 8th, 9th, and 10th dorsal vertebras,

lesion." "Spinal gymnasties," Dr. Wilson thought, "applied with great eare should bring about restoration of the normal spinal function. I agree with you that she must not go on with her teaching for a year."

The arrangement was made for the earrying out of the suggested treatment, when like a flash the patient was whisked off to the neurologist, who said, "Neurasthenia and Rest-cure; she has no back-trouble; no local treatment can be of value until the nervous system has been built up so that there is something to work upon." All of which was idiotic and atrocious, of course, but to be expected of modern "neurology."

There are 15 or 20 million American patients with lateral eurvature, au indefinite but large proportion of whom are being "rest-eured" and invalided and surgicalized to an undeserved death. The orthopedists ignore them, do not treat or mistreat them; the hysteria doetors amuse them, and get amusement for themselves in doing so; the neurologists take their money for naming or misnaming their disease; the gyneeologists take their ovaries, and often more; the general surgeon takes at least their appendiees; the ophthalmie surgeons give them wrong glasses or snip their innocent muscles; the epileptie experts and the sanitariums herd them; the world endures them; the medical profession generally is heartily tired of them. In the meantime osteopathy, mechanoneuralism, eddyism, and a hundred other fraud-follies grow fat and laugh at us.

Case 36.



PATIENT, a man of 43, had been wearing glasses for about 20 years, from many oculists, but without relief of his symptoms, which destroyed his happiness and incapacitated him

for business. His most tormenting symptoms were headache on reading or writing, tiredness of eyes and head, drowsiness, or if near-work is persisted in, insomnia at night. At times there is sevevre indigestion, gastric pain, flatulence, hyperacidity, etc. The left externus had been tenotomized, in previous years. He has long been compelled to disuse one eye by a blinder, which device helps him to read longer than without. I have no record of the glasses of many years ago, but in 1903 he was ordered:

R. — Sph. 0.50 + Cyl. 0.75 ax. 55° L. — Sph. 0.25 + Cyl. 0.37 ax. 120°

B. E. + Sph. 0.50 added for near in "fronts."

A later correction by another read:

R. — Sph. $0.25 + \text{Cyl. } 0.87 \text{ ax. } 45^{\circ}$

L. + Cyl. 0.37 ax. 105°

Distance.

R. Prism 2° Base in,

L. Prism 4° Base in,

Added for near-work.

The patient complained that most of the previous oculists had kept from him their diagnosis,

prescriptions, etc., and had "dealt in mystery" to a ridiculous degree. I ordered:

R. — Sph. $0.12 + \text{Cyl. } 0.87 \text{ ax. } 45^{\circ}$

L. + Cyl. 0.50 ax. 125°

Distance.

R. + Sph. 0.62 and Cyl.

L. + Sph. 0.75 and Cyl.

Near.

Bifoeals.

In a few months he wrote: "Perfect satisfaction with my glasses; use eyes more freely than in several years; often read in evening two hours without the headache that used to follow."

Case 37.

A young business man had long suffered from frontal headache, nausea, drowsiness, inability to study, frequent attacks of indigestion not explainable by imprudence in diet, "nervousness" and restlessness, "rheumatism" in right shoulder. etc. He had, last spring, typoid fever, and appendicitis last summer. He has been tormented with frequent "colds." His oculist, one month prior to coming to me, had ordered + Cyl. 0.25 ax. 90° in both eyes, but these gave no relief. Why? His total error of refraction was:

R. + Sph. 0.62 + Cyl. 0.50 ax. 90° L. + Sph. 0.62 + Cyl. 0.37 ax. 90°.

Correct lenses at once eured him of all symptoms, and he now has no ill health whatever.

Case 38.

A woman of 43 years of age was ordered to wear, for distant, or out-of-door vision, only, the

following correction, by a famous ophthalmic surgeon of a distant city:

Both eyes — Cyl. 0.25 ax. 180° .

She had three tenotomies, resultless, so far as concerns any relief of her symptoms. For the last two years she has been ordered to wear a blinder over the right eye, all the time while at home, and has done so. She has had great and constant pain in the back of her neek and in the spine, and in the last year glycosuria, with other troublesome diseases, have followed. And no wonder that a blinder was necessary and that operations gave no relief, and that various diseases ensued, for her uncorrected, miscorrected, error of refraction was:

R. — Sph. 0.50 — Cyl. 0.62 ax. 90° L. — Sph. 0.37 — Cyl. 0.50 ax. 90°,

and she had need of 1. D. + Sph. added, in bifoeals, for near-work.

Blinders, operations, tenotomomania, and "conservatism" are powerless to eure without correction of ametropia. And that diabetes may be due to eyestrain is the height of absurdity, except to the "New" ophthalmologists.

Case 39.

About eight years ago a business man, then aged 25, began having attacks of "indigestion" with "terrific pains in the stomach." He had had obstinate constipation all his life. He had to carry medicine with him to take whenever the attacks of pain and indigestion come on. On

July 30, 1906, he swooned, and had to be taken home in a earriage. These fainting attacks come on daily for a while, and then there were one or two each week for several months. In December. 1906, there was a sudden blurring of the right eve noticed on arising one morning. An oculist was consulted, who pronounced the disease glaucoma, used eserin, and advised operation. This was refused and another oculist was consulted in another city, who also diagnosed glaucoma and again advised operation. Three days passed and a third oculist in another city was called in, who "laughed at the idea of glaucoma," and "pronounced the disease iritis." When a letter from Oculist No. 3 was delivered to Oculist No. 1, the latter said, "Yes, you have iritis; your eye has ehanged entirely in 24 hours." But no atropin was ordered, and two days more passed. Thus eserin had been used for six days before atropin was ordered, followed by puneture of the anterior chamber. If something had to be punetured why did he not choose the man's heart, or the posterior chamber of the eye?

In the desperate attempt to ignore eauses, the chirurgieomaniac does funny things—funny for "Scienee" if not for the patient-world. A month of atropin-instillations brought no improvement, and Oculist No. 4 said, "there had been bad neglect"; he advised "waiting and seeing what nature would do." Oculist No. 5, myself, found old iritic adhesions, which I finally succeeded in breaking for the most part, eapsnlar

dislocation, etc., and heavy vitreous opacities. My reason for reporting these details is that prior to the attack of iritis, during the period when the swoonings were in progress, Oculist No. 1 had ordered glasses alike in both eyes,. Cyl. O. 50 ax. 90°. What he should have ordered was:

R.—Sph. 0.25—Cyl. 0.87 ax. 180°. L. + Sph. 0.75—Cyl. 1.37 ax. 180°.

These at once gave the patient relief, and he now "feels like a different man since the change of glasses." He has not had any swooning or faintings since getting the glases. There can be no doubt that this patient's constipation, indigestion, gastrie pain, swoonings, and iritis were due to eye-strain at first uncorrected and then increased by bad correction; the inability to estimate the ametropia was caused by the non-existence of a refraction school; the inability of two oculists to differentiate between glaucoma and iritis was due to the worthlessness of the instruction in another kind of ophthalmic school and clinic.

Case 40.

A patient, a woman of 39, suffering from supraorbital pain, nausea, insomnia, dyspepsia, and constipation, consulted a famous ophthalmic surgeon who has a long, long string of visitingsurgeon tails to his name. He ordered:

R. + Sph. 0.3 7 + Cyl. 0.75 ax. 45°. L. + Sph. 0.75 + Cyl. 0.62 ax. 135°. He lost his patient because the proper prescription should have read:

R. + Sph. 0.25 + Cyl. 1.62 ax. 15°. L. + Sph. 0.25 + Cyl. 1.37 ax. 165°.

The first lenses could only have increased the severity of the patient's already unendurable symptoms. There is naturally rancor in the heart of the opthalmologist-to-20 hospitals against the eye-strain exaggerator.

Case 41.

One year ago a New York worshipper of the Ophthalmometer and a violent hater of all eyestrain theories and cranks, gave a patient a pair of lenses, each alike, + Sph. 1.50. This patient had frontal and occipital headaches, with other irritating and painful symptoms, was indeed "threatened with nervous prostration," so that "a six months' trip" was ordered. But the symptoms came back when the patient returned to work. Under a mydriatic I found:

R. + Sph. 2.25 + Cyl. 0.37 ax. 90°. L. + Sph. 1.62 + Cyl. 0.75 ax. 105°.

The man who prescribed, B. E., + Sph. 1.50, was a great leader, textbook maker, politician, ruler of hospitals, medical societies, scorner of eye-strain hobby-ridders, in fact a public denier that ocular malfunction can produce any systemic disease whatever. But this patient should sue him for heavy damages on the ground of malpractice. The opthalmometer is a god who destroys his most abject worshippers.

Case 42.

A woman 46 years of age, complaining of flatulent dyspepsia, constipation, epigastric pain, shoulder pain, neuralgia of the head with crises incapacitating her for one or two weeks at a time, was told by an oculist of a neighboring city that she needed no reading glasses. He was told that the patient was 46 years old. She had 3 D. of astigmatism, and amblyopia from incorrect glasses of 20/40. The modern ophthalmologist, even while scorning the refractionist, should care and be able to diagnose presbyopia.

Case 43.

A few years ago a woman consulted a physician of a Southern city, "who is considered the best oculist in the city." He told her at once, "of course, you do not need glasses! Your eyes are more than perfect." He did not use a mydriatic, and simply proved that for an instant she had 20/20 visual acuteness. This woman "has never been well for a weck," her complaints being many, nausea, dyspepsia, drowsiness, inability to see, irritability, intense nervousness, etc. Her full error of refraction is:

R. + Sph. 2.50 + Cyl. 0.25 ax. 35°. L. + Sph. 2.25 + Cyl. 0.50 ax. 145°.

Will there ever come an end of medieval ophthalmology?

Case 44.

Some 14 years ago an old and famous oculist of a Western city, a professor of ophthalmology, told a woman she did not need glasses. Since 8

then she had frontal, temporal, and sick-headaches, very poor digestion, insomnia, and blepharitis. I found the following refraction-error:

R. + Sph. 1.75 + Cyl. 0.25 ax. $135^{\circ}=20/20$. L. + Sph. 1.62—Cyl. 0.25 ax. $180^{\circ}=20/20$.

With this health-wrecking ametropia, there was exophoria, an adduction no greater than abduction, and subnormal accommodation. All headaches, etc., have since disappeared although the patient is using the eyes hard in near-work. As usual the professor was in error; and because he did not believe that there can be any eyestrain with 20/20 vision. Even now he laughs at the idea that eye-strain can cause any systemic reflex whatever. His colleagues in the medical school think the incumbent of the chair of ophthalmology a scientific gentleman, and a most praiseworthy consultant in neurologic and gastric cases.

Case 45.

A medical student (in an adjacent state), whose father is a physician, went to the Dean of his college asking him to recommend a trustworthy oculist. This was done, and the young man consulted the official scientist, who used no mydriatic, and ordered:

R.—Sph. 2.00—Cyl. 1.00 ax. 180°. L.—Sph. 2.25—Cyl. 0.50 ax. 180°

No relief of many symptoms, inability to study, etc., followed. I found and ordered:

R.—Sph. 1.50—Cyl. 0.62 ax. 180°. L.—Sph. 1.75—Cyl. 0.50 ax. 155°.

A letter soon arrived saying, "I feel as if you had put a new pair of eyes in my head. They never hurt, etc." No use of a mydriatic, overcorrection of myopia, an axis of astigmatism misplaced 20° should be legal evidences of malpractice even in a Professor of Opthalmology. The young physicians, just starting in general practice are learning many things about modern ophthalmology which the conservatives do not know. And the old ones do not know that the young ones are learning to know.

Case 46.

An American lady, aged 52, failing to get relief of severe headaches, nausea, and vomiting from American oculists, went to England and for her money received a prescription reading as follows:

0. D. + Sph. 150. 0. S. + Sph. 1.50.

supposedly for near-use, only.

Strangely she found no relief, because "nature of migraine is unknown, and is incurable."

Finally one American oculist was found who leaves that

Ex oriente lux!

Case 47.

A boy of six had vague symptoms and the solicitous mother was prevailed upon to consult the famous tenotemist, who proceeded to snip one of the tendons of the eye, or the conjunctiva over it, for which he demanded and was paid \$180. The mother soon recovered her natural astute-

ness when she found there was no improvement in the boy's symptoms. Observation soon convinced her that a vermifuge might prove of more avail than tenotomy. At once the symptoms vanished. She wrote the great surgeon that she was very angry at his blunder and cupidity. He replied by courteously asking for a photograph of the boy to put in his forthcoming book as a proof of the marvelous results of tenotomy.

Case 48.

A patient consulted an oculist in New York State, who found a focus of conjunctival congestion, a sort of phlyctchula at the inner corneal border of one eye. Articles had lately appeared in ophthalmic journals praising the treatment of certain (or uncertain) ocular inflammations by intraocular injections. Without consulting the patient the hypodermic needle was used and some drug inserted in the vitreous chamber of the eveball. The resultant suffering and increased inflammation gave the patient severe illness and great solicitude. The patient would not return to the surgeon and was afraid to consult other oculists. At last she did so and spectacles correcting the eye-strain soon cured the scleritis, episcleritis, or conjunctivitis.

Case 49.

A man of 23 was sent to me by a wellknown oculist. The history was that of chronic constipation, intense pain in occiput, eyes bloodshot and uncomfortable, bad feeling in stomach, in-

somnia, irritablity, etc. Oculist A. had ordered, both eye, + Cyl. 0.50 ax. 180°. Oculist B.: R. + Sph. 0.75 + Cyl. 0.25 ax. 180°, L. + Sph. 0.75. Oculist C.: R. + Sph. 0.75 + Cyl. 0.37 ax. 10°, L. + Sph. 0.75 + Cyl. 0.12 ax. 135°, with 0.50 Sph. added for near-work. Oculist D.: R. + Sph. 0.25 + Cyl. 0.50 ax. 180°, L. + Sph. 0.50 + Cyl. 0.25 ax. 180°. Oculist E.: R. + Sph. 0.50 + Cyl. 0.37 ax. 180° with prism 0.5° base up; L. + Sph. 0.62 + Cyl. 0.25 ax. 165°.

Upon attempting to estimate the error of refraction I found about 10° of fluctuating esophoria, a head persistently tilting to the right, the right ear much lower than the left (misplacing the spectacle frames), post mydriatic refraction changes, and subnormal accommodation which required bifocal glasses. There was much improvement noted from the glasses I ordered, but it could not be called "a cure." The patient lived a long distance away, and it was a year or more before I could get him to return. There was then no post mydriatic doubt; there was normal muscle-balance; perfect visual acuity; the head was carried erect; and subnormal accommodation had vanished. The following lenses were ordered:

R. + Sph. 0.50 + Cyl. 0.62 ax. 15°. L. + Sph. 0.50 + Cyl. 0.25 ax. 155°.

For Constant Use.

Two months later he wrote: "Much improved; eyes growing stronger every day with use; have now, after years of lost time, resumed my law

work; I thank you most sincerely. I can read three hours continuously with little sign of weariness." The tilted head was in this case one of the chief causes of failure.

Case 50.

A man, 30 years old, had long been suffering from headache, "practically all the time," sometimes with nausea, with "nervous indigestion," and other "migrainous" symptoms. In the last eight years he has worn spectacles from several prominent oculists in Chicago and New York, but without relief. Although he has perfect muscular balance he has been ordered gymnastic exercises with prisms. He was wearing from a famous ophthalmologist of Chicago:

R.—Sph. 0.25 + Cyl. 1.00 ax. 35°. L. + Cyl. 1.00 ax. 145°.

His static error was found to be:

R. + Cyl. 1.25 ax. $30^{\circ}=20/20$. L. + Cyl. 1.50 ax. $150^{\circ}=20/20$. ordered.

He had previously been "done up" about once a week with his headache and awful pains in the left eye. He now writes that he has not had a severe headache since wearing the spectacles ordered. One-half diopter of astigmatism uncorrected will often make all the difference between happiness and misery.